

Fig. 15. Diagram of terminal section of male generative apparatus; *v.d.*, vasa deferentia; *p.*, prostate; *pr'*, Y-shaped gland; *s.*, cushion-like pad on to which latter opens; ♂ bursa copulatrix; *p.*, penis.

16. Section through vasa deferentia, less highly magnified than fig. 1.

17. Nephridium; *d.*, internal funnel; *m.*, mesentery; *a.*, muscular duct; *b.*, glandular region; *c.*, tuft of tubules.

4. Remarks upon the Moulting of the Great Bird of Paradise. By A. D. BARTLETT, Superintendent of the Society's Gardens.

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In the second volume of 'The Cruise of the Marchesa,' by Dr. F. H. H. Guillemard (p. 340), a strange statement is made upon the authority of the inhabitants of the Aru Islands respecting the moulting and plumage of the Great Bird of Paradise (*Paradisea apoda*). It is there said that this bird, unlike its nearly allied species *P. minor*, does not wear its adult male plumage all the year, and that its beautiful plumes remain developed for not longer than two or three months.

If I had nothing but my acquaintance with the habits and life-conditions of birds to judge from, I should at once question the accuracy of these statements.

I could not readily believe that two species of birds so closely allied as these two Paradise-birds, and having the same arrangement of their plumes and the same structural peculiarities, and inhabiting the same region, could by any possibility differ so widely in this respect. It is, however, a great pleasure to me to be able to offer a very clear and well-established fact in proof of my previous conviction.

On the 1st of October, 1885, I was fortunate enough to have placed under my charge a male of the larger species *P. apoda*. The bird at that time was in the adult male plumage; the side-plumes were not so long as in the old male birds, but the feathers of the tail, together with the two long wire-like central feathers, were well developed. About the end of November the bird commenced to moult, throwing off the feathers rapidly. The head and throat soon became completely bare, the uppermost side feathers fell off first, the new feathers taking their place before the longest feathers of the plumes fell off. By the end of January the bird had moulted every feather, and the whole plumage was entirely new and beautiful. In this condition the bird was transferred on May 2, 1886, to the Zoological Gardens at Antwerp.

I feel therefore, after giving the foregoing facts, fully justified in calling in question the statement of natives and others who may be ignorant, or from some motive wilfully attempt to mislead strangers.

In conclusion I may add, so far as I am able to ascertain, the bird was the only living specimen of the species *P. apoda* ever brought to Europe.